IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (cancelled)

2. (new) A computer, comprising:

means for specifying a set of data intended for computation by a surface region and for handling the set of data as surface region data; and

operating means for operating on at least two pieces of the surface region data in accordance with an instruction.

3. (new) The computer according to claim 2, further comprising:

means for changing a size of a surface region so that, when a pair of surface regions specified for computation do not have the same size, the size of at least one of the pair of surface regions can be changed before the computation so that the size of one of the pair of surface regions corresponds to the size of another of the pair of surface regions.

4. (new) The computer according to claim 3, wherein said means for changing the size of a surface region enlarges or reduces the size of the one of the pair of surface regions relative to the size of the another of the pair of surface regions.

5. (new) The computer according to claim 3, wherein said means for changing the size of a surface region enlarges or reduces the size of at least two surface regions in relation to the size of a further surface region.

6. (new) The computer according to claim 4 or 5, wherein the further surface region is a surface region specified by a destination operand.

7. (new) The computer according to claim 4 or 5, wherein said means for changing the size of a surface region enlarges or reduces the size of the at least two surface regions so that the size of each of the at least two surface regions is equal to the size of the further surface region or corresponds at a predetermined scale ratio to the size of the further surface region.

8. (new) The computer according to claim 4 or 5, wherein said means for changing the size of a surface region performs copy processing or interpolation processing to generate data at a corresponding address.

9. (new) The computer according to claim 8, wherein the interpolation processing is selected from the group consisting of bilinear processing, tri-linear processing, mask processing, point sampling processing and pattern matching processing.

10. (new) A computer, comprising:

a memory storing data;

a preprocessor operable to specify from the data stored in said memory a set of data intended for computation by a surface region and to handle the set of data as surface region data;

an address generator operable to change a size of a surface region so that, when a pair of surface regions specified for computation do not have the same size, the size of at least one of the pair of surface regions can be changed before the computation so that the size of one of the pair of surface regions corresponds to the size of another of the pair of surface regions; and

a processor array operable to perform parallel operations on the set of data intended for computation in accordance with an instruction.

11. (new) The computer according to claim 10, wherein said address generator enlarges or reduces the size of the at least one of the pair of surface regions before the computation so that the size of the one of the pair of surface regions corresponds to the size of the another of the pair of surface regions.

12. (new) The computer according to claim 11, wherein said address generator performs copy processing or interpolation processing to generate data at a corresponding address.

13. (new) The computer according to claim 12, wherein the interpolation processing is selected from the group consisting of bilinear processing, tri-linear processing, mark processing, point sampling processing and pattern matching processing.